



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

CAMBRIDGE.

Abstract of meteorological observations for April and May, taken at Cambridge. By Professor Farrar.

| | | Barometer. | | | Thermometer. | | |
|--------|------------|------------|---------|---------|--------------|---------|---------|
| | | 7 A. M. | 2 P. M. | 7 P. M. | 7 A. M. | 2 P. M. | 9 P. M. |
| April. | { Greatest | 30.55 | 30.48 | 30.41 | 59° | 85° | 61° |
| | { Mean | 29.958 | 29.943 | 29.906 | 36.9 | 53.2 | 42.5 |
| | { Least | 29.56 | 29.56 | 29.58 | 21 | 41 | 25 |
| May. | { Greatest | 30.38 | 30.41 | 30.37 | 66 | 81 | 63 |
| | { Mean | 30.014 | 30.021 | 30.020 | 48.9 | 61.9 | 45.6 |
| | { Least | 29.69 | 29.58 | 29.58 | 38 | 45 | 37 |

April 1, a shower, with much thunder and lightning. 5th and 6th, rain; 11th and 12th, snow, about three inches; 20th, a little rain—whole quantity of rain and snow reduced to water, 2.30 inches.

May 1, a shower; 11th, a shower, with thunder and lightning; 12th, a violent storm; 22d, a shower, with thunder and lightning; 25th and 26th, considerable rain—whole quantity of rain, 5.48 inches.

Mean state of the thermometer in April, about 2 1-2 degrees below the average temperature of the month for the last 25 years; that of May, 4 1-2 below. There have been only two years in which the month of May has been colder, than that of the present year, during the period above mentioned. These were 1793 and 1812.



BOWDOIN COLLEGE, BRUNSWICK.

Meteorological Journal for April. By Professor Cleveland.

Mean temperature from three observations each day, 42°56°

Ditto maxima of heat and cold, 40.03

Mean height of Barometer, 29.687 in.

Greatest monthly range of do. 1.01

Rain and snow reduced to water 1.32

On the 30th the range of the thermometer was 51°

For MAY.

Mean temperature from three observations each day, 50.53

Ditto maxima of heat and cold, 47.04

Mean height of Barometer, 29.789 in.

Greatest monthly range of do. 8.90

Rain, 4.153

On the 7th and 21st, there was thunder, and on the former day it was accompanied with hail, the form of which was remarkable—It was in hexangular pyramids, sometimes half an inch in length.

[THE following article, copied from the *Columbian Centinel*, is a continuation by the same gentleman, of the communication on the *Spots on the Sun* in our last number. There seems very little hope of forming any satisfactory theory respecting these phenomena, with the very few data on which astronomers have to proceed. It is doubtful what effect they may have on our climate. The spots however have been unusually numerous this season, and the weather has been remarkably cold, not only throughout the United States, but in Europe and in the West Indies, at least in the Island of Cuba. The observation in the following paper, that the light of the Sun is less brilliant and dazzling than usual, is unquestionably well founded. We have remarked at different times during the present season, on days when the sky was perfectly clear, that there was a degree of feebleness and dimness in the Sun's rays, not unlike the effect produced by a partial eclipse.—If the Sun should be tired of illuminating this gloomy little planet, and by extinguishing his light, leave us wholly in the dark, what would be the most valuable thing on this globe? We shall thank any ingenious correspondent for an answer.]

The account of the *Spots on the Sun*, republished in the *CENTINEL* of Wednesday last, was written soon after the large spot appeared, which excited so much curiosity. The Sun has been frequently examined since with good telescopes, and every uncommon appearance carefully noted. The large spot, which was visible to the naked eye about the first of May, passed over the sun, and disappeared in the usual manner. In about fourteen days after, a large spot was seen entering the eastern limb of the sun. It moved on and crossed the disk like the former, in the same direction, and apparently through the same regions. There is every reason to believe, that it was the same spot. The time of its appearance and the place of its path, accord very well with such a supposition—Its form, however, was materially different. At first it was a cluster, whose breadth was one half or one third of its length. On its return, it was drawn out like a string of beads, its length being an eighth part of the diameter of the Sun, and its breadth not more than one tenth of its length; but the individual parts appeared to have the same general character. They consisted of little black specks, encircled with shadows of considerable extent. In some parts entirely detached and insulated, in others apparently crowded together. The whole space covered, it was judged, was nearly equal to that occupied by the cluster. But it was evidently growing less, the interruptions became more conspicuous, and it seemed to be resolving itself into several distinct portions.

This spot, according to the regular rotation of the Sun, ought to have returned again about the 20th or 21st of June, had

it continued without changing its place. But no trace of it was to be found at this time. On the 1st of July, a large spot presented itself upon the eastern border of the Sun. It was long and narrow, and much broken. The two ends were most conspicuous. The intermediate parts were faint. They were composed chiefly of that dusky appearance, which surrounds a spot. —A few black specks were just distinguishable. After a few days, it was difficult to trace any connexion between the two extremities. They began to appear, like two independent spots. They have now disappeared behind the Sun. There would be little doubt of this being a second return of the great spot, were it not, that it was about a week too late. Such a retardation is not very easily reconciled with the received hypothesis. It is still more difficult to account for the uncommon character of the season, without departing from Dr. HERSCHEL's views on this subject. If the spots are occasioned by an abundance of fuel, we might expect an abundance of heat; but the season has been cold almost beyond example. The Sun's rays, it has been frequently remarked, have not their usual power. There appears to be less intensity of light as well as heat. Vegetation is languid, and the fruits of the season, it is said, are without their accustomed flavour. Instead of growing warmer, as the spots become less, the weather has been growing relatively colder. The average state of the thermometer in May was about four and a half degrees below the mean temperature of the month; that of June was six degrees; that of July, including the first fifteen days, about ten degrees below. The summer hitherto has been the coldest that has occurred for the last twenty-five years.

It might be supposed, that the largest spots would occasion a sensible diminution of the sun's rays, by a diminution of the radiating surface. But the largest spot scarcely amounted to a five hundredth part of the Sun's disk, and the effect of a much greater obscuration by the interposition of the Moon is very inconsiderable. It is hardly to be presumed, therefore, that so small a proportion of the Sun's heating and illuminating power, as that which is indicated by the relative magnitude of a spot, would be capable of being observed. Besides, the alternation of cold and warm weather appears to have no connexion with the appearance or disappearance of the spots. The mean heat during the first and last of May, when the sun was most obscured, was fifty-two degrees and six tenths. The mean heat during the rest of the month, when the spot was on the other side of the sun, was fifty-one degrees, eight tenths. The mean heat, while the spot was visible in June, was sixty-two degrees and four tenths. Mean heat during its absence sixty degrees. Mean heat of the first fourteen days of July, sixty-three degrees. The most remarkable succession of cold days was from the 4th to the 11th of June.

during which time there were only a few small spots. The very warm days also, which occurred in June, were at a time when the large spots were invisible. We may expect more particular information on this subject from the venerable Dr. HERSCHEL.

Cambridge, July 15th, 1816.

HARVARD UNIVERSITY.

Bowdoin prize dissertations. Three *first* prizes of thirty dollars each, and three *second* prizes of twenty dollars each, were offered in October last, for dissertations on either of several subjects proposed; the candidates as usual to subscribe fictitious names to their productions, with their Academick standing subjoined: the real names to be in sealed papers. In July the prizes were adjudged as follows:

A first premium to a Dissertation on the Christian doctrine of Faith, by ISAAC BOYLE, a senior Bachelor.—

On the reciprocal influence of Literature and Morals, by JOHN G. PALFREY, a junior Bachelor.

A Dissertation on the importance of Commerce, as a source of publick and private wealth, by JUSTIN WRIGHT CLARK, a senior sophister.

Second premium to a Dissertation on the Iliad, by HENRY BROMFIELD PEARSON, a senior sophister.

A Dissertation on the reciprocal influence of literature and morals, by GEORGE BANCROFT, a junior sophister.

A dissertation on the Iliad, by JOHN H. WILKINS, a sophomore.

Theological Establishment. The subscribers to the Proposal for increasing the means for the education of Students in Divinity, and Candidates for the Ministry at the University, assembled on the 17th July, and formed a Society for the promotion of Theological education at the University, with suitable officers, and five Trustees to act with the Corporation, in the appropriation of the funds.

The extended Theological School will probably commence with the next College year, the instruction to be given by different professors and instructors already established at the University. With some addition to the fund, it will be in the power of the Board to institute another Theological Professorship, with a particular view to Resident Graduates studying divinity.

Some gentleman of the Linnean Society have recently made an excursion to visit the mountains of New-Hampshire. They ascertained the height of the *Monadnock* to be 3450 feet, its summit composed of *micaceous schistus*. The *Ascutey* 3106

feet, its summit of *Granite*. The *White Mountains* 6230, the summit of *gneiss*, the sides *micaceous schistus*. The limit of forest trees at the height of 4428 feet. These heights were ascertained by calculations of barometrical observations. The Barometer employed on the Monadnock and the Ascutney was not in perfect order, and these measurements may therefore be subject to some error. That employed on the White Mountains, was regulated with one kept by Professor Farrar at Cambridge, and on being compared with it on their return, it was found not to have varied at all. This measurement therefore may be presumed to be nearly accurate. They found few interesting minerals, but discovered three or four new species of plants. An account of the *Monadnock* has been published by Mr. Dana, in the last number of the *New-England Medical Journal*; and we hope a particular account of the other mountains will be given to the publick. They found vegetation in Mosses to the very summit of the White Mountains.



TO THE EDITOR.

SIR,

In the remarks respecting the Sandwich Islands in the last number of your Review, there is an omission I wish you to have the goodness to supply. Two Gentlemen are referred to as having made a contract with the King of those Islands, and in a note, their names are mentioned. The reference should have been to *three* gentlemen, and the name of Captain *Jonathan Windship* is omitted. I am the more anxious this accidental mistake should be corrected, as the gentleman omitted, is the one, to whom the merit of the discovery of Sandal Wood at those Islands, peculiarly belongs.



Manufacturer's Ball. At the late annual *Lincolnshire stuff* Ball, which was instituted for the encouragement of that manufacture, most of the ladies wore *muslins*. This is not much unlike the *Barbers*, who went to St. James's some years ago to petition his Majesty to wear a wig, and most of them actually appeared with their own hair dressed and powdered.



Receipt for making leather water proof. Mix together one quarter of a pound of tallow, three ounces of common turpentine, one ounce of shellack, and one ounce of bee's wax. Make the boots or shoes *perfectly dry* (this is absolutely essential) and warm, and rub in this mixture, as hot as possible, and repeat this operation every other day, for at least four times successively. The articles thus impregnated will be found perfectly water proof.